

Application No.: 10/645,858  
Filing Date: August 20, 2003

#### **REMARKS**

Claims 1, 2, 16, 17, 21, 24, and 28 have been amended. New Claims 43 and 44 have been added. Claims 25-27 have been cancelled without prejudice as drawn to non-elected subject matter. Claims 1-24 and 28-44 are now pending in this application. The claim amendments are supported by, for example, Figures 1-2, paragraphs [0054], [0061]-[0063], [0066]-[0067], [0084], [0099], and [0139], of the publication of the present application and previous Claim 16. Applicant respectfully requests the entry of the amendments and reconsideration of the application in view of the amendments and the remarks set forth below.

#### **Discussion of Rejection of Claims under 35 U.S.C. § 112**

Claims 2 and 17 were rejected under 35 U.S.C. § 112, second paragraph, as being in definite. In response, the phrase “substantially” has been removed from Claims 2 and 17. Withdrawal of the rejection is respectfully required.

#### **Discussion of Rejection of Claims under 35 U.S.C. § 102(e)**

Independent Claims 1, 21, 24, and 28 were rejected under 35 U.S.C. § 102(e) as being anticipated by Walton I (US 2002/0154705). In response, independent Claims 1, 21, 24, and 28 have been amended. Applicant respectfully submits that Claims 1, 21, 24, and 28 as amended are allowable over Walton I as discussed below.

#### **Rationale of 35 U.S.C. §102**

“For a prior art reference to anticipate a claim under 35 U.S.C. §102, every element of the claimed invention must be identically shown in a single reference.” *Diversitech Corp. v. Century Steps, Inc.*, 850 F.ed 675, 677, 7 USPQ 2d 1315, 1317 (Fed. Cir. 1988)

#### **Discussion of Patentability of Pending Claims**

Walton I neither discloses nor suggests “determining combined data signals in at least one transmitting terminal, said combined data signals being transformed versions of said streams of data sub-signals, said determining being designed such that at least one spatial diversity device of the receiving user terminals only receives data sub-signals being specific for the corresponding

receiving user terminal and having interference between at least two streams of the plurality of streams of sub-user data sub-signals" as recited in amended Claim 1.

Walton I relates to a communication system that can concurrently support a number of transmissions of various types (e.g., control, voice, broadcast, data, and so son) that may have disparate requirements. Figures 3 and 6 of Walton I describes a communication system in which a transmitter with multiple antennas communicates with a receiver with multiple antennas. Though paragraph [0035] of Walton I states that the transmitter may communicate with a number of receiver units; no further detail is given as to such communication. For example, Walton I does not teach "at least one spatial diversity device of the receiving user terminals only receives data sub-signals being specific for the corresponding receiving user terminal and having interference between at least two streams of the plurality of streams of sub-user data sub-signals" as recited in Claim 1.

Paragraph [0058] states that the use of the MIMO communication mode may be applied to a specific user (e.g., a data user) and concurrently use of the diversity communications mode may be applied to another specific user (e.g., a voice user) on a different sub-channel. In other words, two users on the same user terminal may use different communication mode. Paragraph [0058] does not relate to using two user terminals, much less that "at least one spatial diversity device of the receiving user terminals only receives data sub-signals being specific for the corresponding receiving user terminal and having interference between at least two streams of the plurality of streams of sub-user data sub-signals."

Therefore, Claim 1 is not anticipated by Walton I. Further, none of the applied prior art teaches this feature. Therefore, Claim 1 is allowable over the applied prior art. Withdrawal of the rejection is respectfully requested.

Each of amended Claims 21, 24, and 28 recites a similar feature as discussed above with regard to Claim 1. For the same reason stated above, these claims are allowable over the applied prior art. Withdrawal of the rejection is respectfully requested.

**Discussion of Rejection of Claims under 35 U.S.C. § 103(a)**

Independent Claim 16 was rejected under 35 U.S.C. 103(a) as being unpatentable over Walton I in view of Walton II (US 2003/0125040). In response, independent Claim 16 has been

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amended. Applicant respectfully submits that Claim 16 as amended are allowable over Walton I and Walton II as discussed below.

**Obviousness Standard**

To establish a *prima facie* case of obviousness a three-prong test must be met. First, there must be some suggestion or motivation, either in the references or in the knowledge generally available among those of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success found in the prior art. Third, the prior art reference must teach or suggest all the claim limitations. *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991). See M.P.E.P. § 2143. This is modified by the motivation flowing from (1) the prior art references, (2) the knowledge of the skilled technologist, or (3) the nature of the problem being solved. *In re Dembicczak*, 775 F.3d 994 (Fed. Cir. 1999). This rule has recently been clarified as being flexible in allowing a reason to combine. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007).

**Analysis**

Applicant respectfully traverses this rejection because the prior art references, alone or in combination, do not teach or suggest all the claim limitations. Particularly, the combination of Walton I and II neither discloses nor suggests “applying a filtering on said subband processed received data signals, said linear filtering and said transforming being selected such that the filtered subband processed received data signals are specific for one of said transmitting terminals and have interference between at least two streams of the plurality of streams of data sub-signals” as recited in amended Claim 16.

Walton I does not teach or suggest this feature. As discussed above with regard to Claim 1, the communication system of Walton I in which a transmitter with multiple antennas transmits communicates with a receiver with multiple antennas. Though paragraph [0035] of Walton I states that the transmitter may communicate with a number of receiver units, no further detail is given as to such communication

Walton II also does not teach or suggest this feature. The cited paragraph [0091] of Walton II teaches that, if the channel characterization is available at both the transmitter and receiver, pre-filtering and post-filtering may be used at the transmitter and receiver side

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respectively to derive the modulation symbols. Paragraph [0091] of Walton II does not teach "the filtered subband processed received data signals are specific for one of said transmitting terminals and have interference between at least two streams of the plurality of streams of data sub-signals" as recited in Claim 16.

\* Therefore, the prior art references do not teach or suggest all the claim limitations of Claim 16. Withdrawal of the rejection is respectfully requested.

**Dependent Claims**

Claims 1-24 and 28-44 are now pending in this application. Claims 2-15, 17-20, 22, 23, and 29-44 are now pending in this application. are dependent either directly or indirectly on the above-discussed independent Claims 1, 16, 21, 24, and 28. Although not separately argued, Applicant does not necessarily agree with the rejections or characterizations of the prior art made by the Examiner. Applicant respectfully submits that pursuant to 35 U.S.C. § 112, ¶4, the dependent claims incorporate by reference all the limitations of the claim to which they refer and include their own patentable features, and are therefore in condition for allowance. Therefore, Applicant respectfully requests the withdrawal of all claim rejections and prompt allowance of the claims.

**No Disclaimers or Disavowals**

Although the present communication may include alterations to the application or claims, or characterizations of claim scope or referenced art, Applicant is not conceding in this application that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. Applicant reserves the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that Applicant has made any disclaimers or disavowals of any subject matter supported by the present application.

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CONCLUSION

In view of Applicant's remarks, it is respectfully submitted that the present application is in condition for allowance. Should the Examiner have any remaining concerns which might prevent the prompt allowance of the application, the Examiner is respectfully invited to contact the undersigned at the telephone number appearing below. Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP



Dated: 3/27/09

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